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Validity and Effectiveness of Dhikr Breathing Relaxation Model Therapy on Insomnia Disorders

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Abstract. *Insomnia is the most common sleep disorder reported by the public, which impacts disrupting activities during the day and worsening body health. Therefore, interventions are needed to improve the quantity and quality of sleep for the body to be healthier. This study aims to analyze the content validity and the effect of applying dhikr breathing relaxation therapy on insomniacs. This research and development involved five experts/psychologists with a minimum education of a master's in psychology and nine people with insomnia in their productive age domiciled in Surakarta as the research subjects. Insomnia subjects were chosen using the sequential-random sampling method and selected utilizing the Insomnia Severity Index (ISI). The measuring instrument used was a content validity assessment questionnaire assessed by experts (raters). The content validity analysis employed Aiken's V coefficient, and the effect of the therapy application was analyzed descriptively from qualitative data in the form of interviews a week after the therapy application on the subjects with insomnia. The validation test results obtained an average V value of 0.981. The analysis results showed that the effects of applying the therapy model, in general, had a positive influence on improving sleep quality, characterized by ease of entering sleep, reducing the frequency of awakening during sleep, and waking up refreshed. In conclusion, the dhikr breathing relaxation therapy model has a positive effect on improving sleep quality. This study implies that the dhikr breathing relaxation therapy model is appropriate and feasible to use as a therapy to reduce insomnia symptoms.*

Keywords: *dhikr breathing relaxation; effect; insomnia.*

INTRODUCTION

Good quality sleep in sufficient quantities is vital for the body because it makes it healthier and can prevent the body from developing various diseases (Buysse, 2014). Quality sleep will also influence increasing work productivity, maximum body resistance, and avoiding several degenerative diseases; on the other hand, prolonged lack of sleep can weaken the body's defense system and make the body more susceptible to illness and infection (Besedovsky et al., 2019). Lack of sleep at night is a common complaint often reported. If difficulty initiating and maintaining sleep occurs for a

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long time and causes fatigue and difficulty concentrating during the day, the problem may be called insomnia (Hubbling et al., 2014). Criteria for insomnia based on the Diagnostic and Statistical Manual of Mental Disorders (DSM) are individual complaints of dissatisfaction with the quality and quantity of sleep; specific symptoms, such as difficulty initiating sleep, maintaining sleep, early awakening; fatigue, cognitive impairment, mood disorders, academic or occupational disorders, social disorders, behavioral problems; frequency occurs about three times per week; duration of three months; inadequate opportunity for sleep (Taylor et al., 2014). Based on the International Classification of Sleep Disorders-3rd, the classification of insomnia includes chronic insomnia disorder, short-term insomnia disorder, and other insomnia disorders (Bollu & Kaur, 2017).

According to Bollu & Kaur (2017), populations more susceptible to insomnia development are experienced by various age groups, women, and the elderly (>65 years). Psychosocial factors, such as work stress, shift work, loss of a loved one, divorce, and domestic violence, can cause significant sleep disturbances (Bollu & Kaur, 2017). Based on data from the American Academy of Sleep Medicine (Deng, X., Liu & Fang, 2020), approximately 30%-35% of the general adult population in the United States has brief insomnia symptoms. In Indonesia, the prevalence of insomnia was around 10%, denoting that 28 million people out of 238 million Indonesians suffered from insomnia (Rimbawan & Ratep, 2016).

The impact of insomnia can increase the risk of depression, anxiety, substance abuse, suicide, vehicle accidents, and possibly immune dysfunction with chronic insomnia. Insomnia can also significantly affect daytime functioning, resulting in waking tired in the morning, decreased productivity at work, susceptibility to errors and accidents, inability to concentrate, frequent daytime naps, and a poor quality of life (Bollu & Kaur, 2017). In addition, insomnia can be a primary or secondary symptom of other pathological problems, such as depression, anxiety disorder, bipolar affective disorder, panic attacks, substance abuse, or other medical or psychopathological conditions (Holdevici, 2014). If not handled properly, this insomnia disorder will be dangerous for the sufferer and others. Given the many negative effects of insomnia in various aspects of life, it is crucial for individuals who experience insomnia to get treatment.

There are two treatment managements for insomnia: treatment with drugs and without drugs (Bollu & Kaur, 2017). Medications containing hypnotic agents can reduce sleep latency and increase the number of hours of sleep at night, but there are negative effects, such as drug dependence, drug tolerance, and side effects (e.g., drowsiness the next day, acute memory impairment, impaired balance, and sleepwalking disorders). It causes most insomniacs to seek alternative treatments other than drugs (Nawi et al., 2014; Ong et al., 2018). In this case, cognitive behavioral therapy for insomnia is the mainstay of insomnia management (Bollu & Kaur, 2017), which includes relaxation techniques.

Relaxation techniques are the most frequently used insomnia treatment (Sateia & Buysse, 2010). The basis for using relaxation techniques in the treatment of insomnia stems from the hypothesis that insomniacs suffer from increased somatic and cognitive arousal. Relaxation methods reduce somatic and cognitive arousal, increasing the likelihood of the sufferer falling asleep. Relaxation therapy or meditation is also one of the non-pharmacological treatments, which according to Bagheri in (Ibrahim et al., 2019), can assist in providing a quick fix. Regular breathing exercises, meditation, or yoga can help improve sleep patterns and reduce underlying anxiety and stress (Bollu & Kaur, 2017).

The relaxation therapy model of dhikr breathing combines the relaxation therapy model with Islamic concepts, i.e., the meditation of dhikr breathing. The Islamic-based therapy model that has been applied as a therapy for insomnia is dhikr relaxation (Purwanto, 2012). According to

a study by de Diego-Cordore (2020), spirituality and religion have a promising role in better sleep. Here, Islam is a religion believed by most Indonesian population, so the Islamic-based therapy application will be accepted and give a better impact. Islam also has a belief system that can be an additional element of therapy. Several studies have used Islamic beliefs to impact the therapy process (Perwataningrum et al., 2016; Soliman & Mohamed, 2013). Applying an Islamic-based therapy model for insomniacs has improved sleep quality and decreased insomnia levels (Fandiani et al., 2017; Vitaliati, 2017).

Dhikr breathing is defined by Purwanto (2012) as a state of awareness about God in every inhalation and exhalation. Every breath in is accompanied by dhikr *Huu*, while every breath out is carried out by the heart for Allah. Considering that the breath leads to the awareness of Allah SWT, a conscious transcendent consciousness, it will be the basis for accepting everything that happens during the dhikr process. The awareness of breathing will make the subject feel breathless; awareness of everything happening in the body will also lead to acceptance of the body. On the other hand, the cause of stress is not accepting what is happening. Hence, accepting what is happening will cause the mind and emotions to relax and the body's muscles to rest. This situation can cause drowsiness in the subject (Purwanto, 2012).

The dhikr breathing method developed by Purwanto in 2012 is divided into four stages. The first stage is to sit back and be aware of breathing in and out. Next, the second stage is to continue the procedure for dhikr in the first stage, only that it is added with the pronunciation of *Huu* when the breath goes in and the dhikr of Allah when the breath comes out. In the third stage, when the breath goes in and dhikr *Huu*, there is an awareness of getting closer to Allah SWT, and when the breath comes out and dhikr Allah, awareness is brought to pleasure or surrender to Allah SWT. Finally, the fourth stage is realizing a state of awareness of surrendering and fully accepting God (Purwanto, 2012). Purwanto's (2016) research showed that dhikr breathing could be used as a therapy to improve one's sleep quality. For this reason, this study specifically aims to develop a relaxation therapy module for dhikr breathing to reduce insomnia disorders. The problem formulation in this research is: Is dhikr breathing relaxation therapy feasible to be applied as insomnia therapy?

METHOD

This type of research is research and development. This research is in the developing stage of a therapy model and to test the effectiveness of the therapy model of dhikr breathing relaxation on insomniacs. This module test involved five psychologists with a minimum education of master's degree and nine insomniacs. The insomnia subjects were insomniacs selected from 20-40 because this age is productive. The selection of insomnia subjects was carried out using a sequential-random sampling method, a technique in which the population is sampled sequentially. In this case, data collection and analysis were carried out at each stage. This technique was chosen because the insomnia population was relatively small and was based on certain characteristics: the presence of sleep problems, productive age, and domicile in Surakarta. Insomnia subject selection used the Insomnia Severity Index (ISI), with a Likert scale of 0-4. ISI contained seven-question items: difficulty initiating sleep, difficulty staying asleep, waking up too early, dissatisfaction with sleep, visibility of sleep disturbances by others, the influence of sleep problems on daily activities, and irritation with sleep problems.

The therapy media applied were in the form of modules and audio media (recording) of the therapy model of dhikr breathing relaxation. Before being applied to the target subjects,

the module and audio media (recording) were assessed for validation by the experts (raters). The measuring instrument used was a content validity assessment questionnaire, with a Likert scale of 1-4 (1 = "Highly Not Appropriate", 2 = "Not Appropriate", 3 = "Appropriate" and 4 = "Very Appropriate"). The research application stages of the therapy model of dhikr breathing relaxation were as follows: First, research participants were obtained from the screening process using the Insomnia Severity Index (ISI) with a validity of 0.971-1 and reliability of 0.997. Second, therapy was carried out through training from ready-made modules. The training in applying this dhikr breathing relaxation model was carried out by qualified trainers: who had experience in training and had a master's degree in psychology. The trainer was not among the researchers to avoid any form of bias. The training participants received special training for a day to understand the intervention module delivered. The relaxation therapy model was applied in three training sessions: body scan relaxation, breathing relaxation, and dhikr breathing relaxation. Finally, a therapy evaluation was made after one week of therapy. The things evaluated included the implementation at home before bed, difficulties during the exercise, and the respondent's suggestions for the audio module at home.

The analysis used in this study was the validity testing of the therapy model, calculated using the Aiken's (V) coefficient formula $[V = \frac{\sum S}{(n(c-1))}]$, $S = r - l_0$; l_0 is the lowest score for validity (1); c is the highest score of validity assessment (5); n is the number of raters; r is the number given by the rater (Hendryadi, 2014). After obtaining the Aiken's V coefficient per assessment item in the form of a questionnaire, it was then averaged as a whole. Analysis of the therapy model application's effects used descriptive qualitative data from interviews one week after the therapy model application.

RESULTS AND DISCUSSION

The relaxation therapy model of dhikr breathing is a combination of the breathing relaxation model with dhikr, designed based on the preliminary research results regarding the discussion of the material arranged in this therapy model. Before being applied to insomniacs, it was necessary to conduct a validity assessment to evaluate the suitability of the therapy model and analyze the effects of applying the therapy model of dhikr breathing relaxation.

Validation of the therapy model of dhikr breathing relaxation

This therapy model was developed with targets for insomniacs. Before being applied to the targets, a validation test was conducted by experts to assess the suitability of the therapy model with the goals of the therapy model, the target audience, and psychological scientific materials. The scores for the therapy model of dhikr breathing relaxation were analyzed using V Aiken's coefficient validity analysis. The analysis results can be categorized as valid if they meet the limits of Aiken's V coefficient. The limit requirement of the V Aiken coefficient for four rating scales and five raters is 0.87 ($p=0.021$). Table 1 summarizes the validation test results for the experts' relaxation therapy model of dhikr breathing.

The validity assessment results of the therapy model of dhikr breathing relaxation showed that of the 16 items assessed, a V coefficient value of 0.933 to 1 was obtained, and overall, the therapy model had a V value of 0.981. The V coefficient results on 16 items were higher overall than the standard Aiken's coefficient of 0.87 ($p = 0.021$) (Aiken, 1985). Thus, it can be concluded that the therapy model of dhikr breathing relaxation was valid and feasible to be used as a therapy model.

Table 1.
 The validation test results of the relaxation therapy model of dhikr breathing by experts

Aspect	Rated Items	V	Description
Full contents	Covering for sleep therapy	1.000	Valid
	Suitable for sleep therapy	0.933	Valid
	The material presented is in accordance with the scientific truth of psychology.	0.933	Valid
Introduction	Synopsis clarity	1.000	Valid
	Purpose clarity	1.000	Valid
	Target clarity	0.933	Valid
Script module material			Valid
Body scan relaxation	Easy to understand	0.933	Valid
	Material clarity	0.933	Valid
	Ways to deliver material	1.000	Valid
	Word choice and sentence structure	1.000	Valid
Breathing relaxation	Easy to understand	1.000	Valid
	Material clarity	1.000	Valid
	Ways to deliver material	1.000	Valid
	Word choice and sentence structure	1.000	Valid
Dhikr breathing relaxation	Easy to understand	1.000	Valid
	Material clarity	1.000	Valid
	Ways to deliver material	1.000	Valid
	Word choice and sentence structure	1.000	Valid
The process/stages of therapy	Therapy activities are in accordance with the therapy sequence process.	1.000	Valid
	The therapist's activity is in accordance with the therapy process.	0.933	Valid
	Participants' activities are in accordance with the therapy process.	1.000	Valid
Audio media (recording)	Clear voice	0.933	Valid
	Able to lead to sleep	1.000	Valid
Overall Average		0.981	

V= Aiken's coefficient

Analysis of the Effects of Application of Dhikr Breathing Relaxation Model Therapy

The training process was divided into three sessions. The training was guided by a competent, experienced facilitator (trainer) in psychology training (psychotherapy). Since the therapy model of dhikr breathing relaxation was applied during the pandemic, the training venue was in an open space and still observing strict health protocols. Analysis of the training effect in each session was carried out qualitatively. The facilitator gave open questions to the subject about experiences or things experienced during the training in body scan relaxation, breathing relaxation, and dhikr breathing relaxation sessions.

In the therapy module used, the first therapy session was a body scan relaxation. In the body scan relaxation session, the insomniac subjects were invited to explore all body parts to feel relaxed. The relaxed state would make it easier for the insomniac subjects to receive all the sensations in

all body parts and make it easier to wake up and fall asleep. Insomnia subjects were also invited to focus on body sensations gradually from the lowest body part to the upper body part and accept these body sensations. The body scan relaxation session was 90 minutes long.

Table 2.
 Subject experience during the training session of body scan relaxation

Subject	The things felt	Code	Conclusion
SL1	Voice change	C1	A total of three subjects felt a change in the sound of the audio media delivered.
	Audio quality	C2	
	There is a sound all around.	D1	A total of three subjects felt that the quality of the audio media delivered was inappropriate.
	Fall asleep during practice	E2	
SL2	Voice switching	C1	A total of nine subjects felt disturbed by the ambient sound.
	Got to sleep	E2	
	Disturbed by the sound around	D1	
SL3	Disturbed by surroundings	D1	A total of one subject felt disturbed by dreams.
SP1	-	-	A total of one subject felt disturbed by his sleeping position.
SP2	Feeling sleepy during exercise	E1	
	Disturbed by surroundings	D1	
SP3	Intonation changes.	C1	A total of five subjects felt sleepy during the training.
	Disturbed by alarm	D1	A total of two subjects fell asleep during the training.
	Got sleepy	E1	
SP4	Sleepy	E1	A total of two subjects felt relaxed during the training.
	Disturbed by dreams	D2	
	Disturbed by the child's voice	D1	
SP 5	Feeling sleepy	E1	
	Disturbed by sleeping position	D3	
	Disturbed by the sound of the alarm	D1	
SP 6	Feel relaxed	E3	
	Disturbed by the alarm	D1	
SP7	Less melodious voice	C2	
	Disturbed by ants	D1	
	Feel relaxed	E3	

Table 2 summarizes the subjects' experiences during the training session of body scan relaxation. During the body scan relaxation session, some subjects felt a change in the sound of the audio media delivered; the quality of the audio media delivered was not appropriate; they were disturbed by surrounding sounds, disturbed by dreams, disturbed by sleeping position, and sleepy during training, falling asleep during training and feeling relaxed during training.

After the body relaxed with the body scan method, in the next session, the subjects were invited to relax and focus more by letting the breath. Breathing in and breath out allowed. This session is known as a breathing relaxation session. The breathing relaxation session combines relaxation methods by incorporating meditation and focusing on the breath. This session allowed the subject to feel disturbed by the surrounding environment. Subjects were invited to be aware of, accept, and let what was happening in the surrounding environment and returned to focus on their

breath until this session was over. The breathing relaxation session was 90 minutes long.

Table 3.
 Subject experience during the breathing relaxation training session

Subject	The things felt	Code	Conclusion
SL1	Sleeping more comfortably	E3	A total of one subject felt disturbed by the sound around.
	More self-aware	E4	
SL2	More comfortable	E3	A total of one subject felt disturbed by dreams.
SL3	The chest feels looser.	E5	
SP1	Got to sleep	E2	A total of two subjects felt physically disturbed.
	Disturbed by coughing	D4	
SP2	Sleepy	E1	A total of two subjects felt sleepy during the training.
	Shortness of breath and tightness in the stomach	E5	
	Not clear dreaming	D2	
SP3	Feel relaxed	E3	A total of eight subjects fell asleep during the training.
	Got to sleep	E2	
	Itchy feet	D4	A total of five subjects felt relaxed during the training.
	Accepting	F1	
SP4	Falling asleep faster	E2	A total of one subject felt more aware during the training.
SP5	Shocking audio sound	D1	
	Asleep	E2	
SP6	Feel relaxed	E3	A total of four subjects felt relaxed during the training.
	Legs shaking by themselves	E5	
	Got to sleep	E2	
SP7	Feel more relaxed	E3	A total of one subject felt accepted the situation.
	Almost asleep	E2	
	Feels floating	E5	
SP8	Got to sleep	E2	A total of one subject felt accepted the situation.
SP9	Had fallen asleep	E2	
SP10	Sleepy	E1	

Table 3 summarizes the subjects' experiences during the breathing relaxation training session. During the breathing relaxation session, some subjects felt disturbed by the sounds around, disturbed by dreams, physically disturbed, sleepy during training, asleep, relaxed during training, feeling more aware during training, feeling relaxed during training, and feeling accepting of the situation. Furthermore, the third session, the last session of therapy, was the dhikr breathing relaxation. In this dhikr breathing relaxation session, the subjects were invited to do a comprehensive therapy, including body scan relaxation, breathing relaxation, and dhikr breathing relaxation. In this session, the subjects were also directed to be aware of and accept the breath that went in and out and was aware of the spoken dhikr sentences following each breath in and out in a relaxed manner. Here, the element of belief (dhikr) can accelerate the state of relaxation. Moreover, insomniacs often complain of not being able to sleep and making themselves stressed. The stress is caused by not accepting what is happening to oneself. Therefore, the purpose of accepting the situation was to accelerate the subjects to feel relaxed. The dhikr breathing relaxation session also lasted 90 minutes.

Table 4.
 Subject experience during the training session of the dhikr breathing relaxation

Subject	The things felt	Code	Conclusion
SL1	More relax Got to sleep	E3 E2	A total of one subject felt disturbed by the sound around.
SL2	More comfortable Constantly falling asleep	E3 E2	
SL3	Getting sleepy Got to sleep	E1 E2	A total of two subjects felt physically disturbed.
SP1	Got to sleep	E2	
SP2	Can sleep Itchy eyes	E2 D4	A total of two subjects felt sleepy during the training.
SP3	Got to sleep Disturbed by sound Dizzy	E2 D1 D4	
SP4	After eating, pain in the stomach, back, and heartburn	D4	A total of five subjects felt relaxed during the training.
SP5	Gastric pains Can sleep There was a car sound. Got to sleep	D4 E2 D1 E2	A total of one subject felt more aware during the training. A total of four subjects felt relaxed during the training.
SP6	Disturbed by stomach	D4	
SP7	Feel relaxed Disturbed by the throat Dream of calling, <i>Mbak</i>	E3 D4 D2	A total of one subject felt accepted the situation.
SP8	Got to sleep	E2	
SP9	Sleep soundly	E2	
SP10	Sleep soundly	E2	

Table 4 summarizes the subjects' experience during the session training of the dhikr breathing relaxation. During the dhikr breathing relaxation session, some subjects felt disturbed by the surrounding sound, disturbed by dreams, physically disturbed, felt sleepy during training, fell asleep during training, and felt relaxed during training. The application results of the dhikr breathing therapy model, in general, had a positive effect on improving sleep quality, which can be seen from the number of subjects feeling sleepy, sleeping, and relaxed during training.

Evaluation of Subject Experience After One Week of Model Application

This evaluation aimed to assess how much influence the application had on the target subjects' sleep behavior and quality. The evaluation was carried out one week after the therapy model application and running the therapy model of dhikr breathing relaxation independently at home. The evaluation method was performed by interviewing the target subjects again by telephone.

Table 5 summarizes the results of the interviews after one week of applying the therapy model of dhikr breathing relaxation. In general, in implementing the dhikr breathing relaxation

practice at home for one week, the subject experienced increased sleep quality (7). It indicates that subjectively, they experienced an increase in sleep comfort. By listening to and following the audio instructions, participants experienced a process of relaxation, got a sleepy state, and could sleep. This subjective improvement in sleep quality was also characterized by ease of entering sleep (5). Following the guide of the dhikr breathing relaxation made the duration from lying down to sleep faster than usual. The second sign of improved sleep quality was waking up feeling refreshed (4). Waking up in the morning in a fresh state indicated that during sleep, respondents experienced a state of deep sleep longer than usual. A deep sleep state allowed the respondents to rest, so they woke up feeling refreshed. The third sign of increased quality sleep was reduced wakefulness during sleep (2). Waking up during sleep can cause fatigue and indicate that the sleep is not deep; one sleeps more often but wakes up easily. The emergence of many dreams during sleep is also the cause of frequent awakenings from sleep. However, the results of evaluating the effect of applying the therapy model in this study cannot be compared with other studies due to differences in the data collected. The data collected in other studies are quantitative, while in this study, the data collected are qualitative.

Table 5.

Interview results after one week of applying the therapy model of dhikr breathing relaxation

Description	Code	Frequency
Improved sleep quality	A1	7
Easy to enter sleep	A2	5
Wake up refreshed	A3	4
Not waking up at night	A4	2
Not sleepy during the day	A5	1
More relax	A6	2
Accepting	A7	1
Has no effect on treatment	A8	1
Able to self-guide	A9	1
Improvements to recording	B1	7
Condition improvement	B2	1
Tempo	B3	2

Several studies have shown a significant correlation and influence between therapy models combining breath relaxation with dhikr meditation on sleep latency and insomnia levels. The study results (Purwanto, 2016) regarding the dhikr breathing therapy model showed a significant relationship with sleep latency. Sleep latency is the period between preparation for sleep and the onset of sleep and is the main indicator to determine a person's sleep quality (Purwanto, 2016). The results of other studies (Vitaliati, 2018) revealed the effect of religious relaxation on insomnia so that it can be used as a solution to improve insomnia conditions. Religious relaxation in research (Vitaliati, 2018) combines deep breathing relaxation with repeated chanting of "Allah" and praying accompanied by an attitude of resignation. In another study (Cahyaningtias et al., 2021), there were differences in the combination of therapy models applied. Their study (Cahyaningtias et al., 2021) investigated the effect of a combination of dhikr and progressive muscle relaxation on the insomnia level in the elderly. Their study uncovered a significant difference between the insomnia

level in the elderly before and after combination therapy of dhikr and progressive muscle relaxation, with a p -value = 0.001.

One of the limitations of this study is that there was no quantitative data on the sleep quality of insomniac subjects using standard insomnia measuring instruments, so the scores of the effect's analysis before and after the application of the therapy model of dhikr breathing relaxation could not be seen statistically. In further research on the therapy model application, it is hoped that researchers can prepare supporting measuring instruments to be statistically tested for the effect of their application.

CONCLUSION

This study concludes that the therapy model of dhikr breathing relaxation had good content validity on all components, i.e., modules, audio media (recording), and trainers. The evaluation results of applying the therapy model of dhikr breathing relaxation, in general, had a positive influence on improving sleep quality, characterized by easier entering to sleep, waking up in a fresher state, and reduced awakening during sleep. Therefore, the model of dhikr breathing relaxation therapy can be used as a solution to improve one's sleep quality.

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